

GRIZZLY SAVVY, INC.

High School Lesson – Wildlife Management

GRIZZLY SAVVY, INC.

Wildlife Management

Developed By: Dan Bertalan

Target Grade Level: 9-12

In This Activity...

Students will research, develop, and make presentations from different perspectives on reducing conflicts with grizzly bears in a mock business enterprise called **Grizzly Savvy, Inc.** Students will develop and present their different group perspectives as part of entire class discussion on how to best educate different sectors of the public about living and recreating in grizzly country.

Science Categories

Public safety, Wildlife biology, Social and biological carrying capacity

Time Frame ~2.5 hrs; 3 class periods

- **Session 1:** Introduction, Video, Distribute Worksheets
- **Session 2:** Team Research & Educational Plan Development
- **Session 3:** Stakeholder Group Presentations & Class Discussion

Overview

As both grizzly bear and human populations expand across certain areas in the Western states, bear-human conflicts will also continue to expand. Grizzly bear managers agree that the single biggest tool to reducing these conflicts is **public education** about how to responsibly avoid encounters and how to handle encounters with grizzly bears. That educational challenge however is complex because different sectors of the public often need different strategies and tools, plus, reaching those different sectors require different educational messages and delivery systems. For instance, tourist guides in Yellowstone have very different educational needs and tools compared to livestock ranchers in Wyoming and Montana. Though state and federal agencies are often entrusted with many wildlife education programs, including grizzly bears, today there are non-profits and even for-profit enterprises who also engage in grizzly bear education.

EDUCATIONAL PARTNERS



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In this lesson, students will discuss their current knowledge of grizzly bears, watch a video about reducing conflicts with grizzly bears while answering a questionnaire, then assume the roles of various perspectives in researching, developing and presenting their **Grizzly Savvy, Inc.** business plan. Classroom presentations and discussions will provide drive peer-driven interactive learning where the entire class is involved in developing educational messaging and strategies on being “Grizzly Savvy”.

Enduring Understanding

Students will understand the differences between the various public perspectives and the different educational strategies for public education for reducing conflicts with grizzly bears.

Content Objectives

Students will be able to evaluate the educational and social considerations in grizzly bear education programs. They will also be able to research, develop and present a “Grizzly Savvy, Inc. Business Plan” to address solutions to educating the public about preventing grizzly bear conflicts and how to handle encounters when they occur.

Learner Objectives

Students will use custom student “educational stakeholder” worksheets and online research to determine the challenges and potential solutions to educating different public sectors about grizzly bears. Students will use their online research to develop and present their group’s “Grizzly Savvy, Inc. Business Plan” that considers the educational needs of various sectors of society.

Process Objectives

Students will work in small and large groups to process new information and use evidence to come to conclusions.

Materials Needed

- Access to computers and the Internet
- [Reducing Human-Grizzly Conflicts](#) video (online)
- **Student Video Worksheet** with questions to fill in while watching the video
- Three (3) different **Public Education Group Worksheets**

Procedure

Session 1 – Before watching the [Reducing Human-Grizzly Conflicts](#) video ask students what they know about avoiding conflicts with grizzly bears (not black bears) and what to do if they have one. Also ask students if they have ever seen a grizzly bear, where, and their concerns about conflicts. Lead a short discussion on what they know about how professionals educate the public about potentially dangerous species of wildlife.

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Print and distribute the Student Video Worksheet (included in the Lesson PDF). Instruct students to fill in the worksheet while watching the video. Go over the questions with the students before viewing so they know what to look and listen for.

After viewing the video, review and discuss the answers to the questions as a class while encouraging discussion.

Next, divide the class into these three different Grizzly Savvy, Inc. educational groups:

1. **Recreationist Educators**
2. **Residents Educators**
3. **Agricultural Educators**

Inform students they will be working together as budding business entrepreneurs in Grizzly Savvy, Inc. working as educational development teams within their specific educator group to achieve their assigned public impact goals in Sessions 2 and 3.

Session 2 – Team Research & Educational Plan Development

Print and distribute the three Grizzly Savvy, Inc. educational group worksheets to the various groups (worksheets included in the Lesson PDF). Each of the group worksheets have detailed instruction and informational links to guide students on their research and presentations.

Each group will have specific and different educational challenges in their goals in educating the public about sharing the landscape with grizzly bears. In their separate assigned groups, have students perform research and discussion in developing their specific Grizzly Savvy, Inc. Plan. The worksheets provide instructions and research guidelines for students to gather information.

Inform each group that two members of their group will also present their **“Grizzly Savvy, Inc. Educational Plan”** to the entire class during Session 3. Their presentations should be supported by factual research and/or evidence and presented with at least one form of art or media prepared by the group (either video, poster, graphs, charts, images).

Session 3 – Group Presentations & Class Discussion

Have each of the three groups present their **Grizzly Savvy, Inc. Educational Plan** and the supporting research and main reasons for their plans. Limit each group to 8 to 10 minutes of presentation time followed by several minutes of questions by the other groups.

After the three groups present their Grizzly Savvy, Inc. Educational Plans, lead a group discussion on how similar or key elements of the various plans could be included in an overall plan to best serve the goals or interests of all three groups. The teacher may assist in leading the discussion while listing the key or similar aspects of each group's plans, including similar challenges. Conclude the discussion

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by asking each group how they might effectively distribute their messaging to their target audiences. Also ask how they might make Grizzly Savvy, Inc. as sustainable business (either for profit or as a non-profit).

Assessment

Students will be informally assessed based on their participation within their groups and during class presentations and discussions. Teachers could collect the discussion notes students took during the video to check for completion.

Students can be formally assessed using their Student Video Worksheets. Students can be assessed on meeting the formal learning objectives on how thoroughly students completed their Grizzly Savvy, Inc. Educational Plan worksheets.

Extension Activities

Students could watch the related classroom videos or full documentary, *Grizzly Bears Beyond the Horizon*, to expand their understanding of those complex challenges. They can also conduct research on the current or changing policies or strategies on avoiding conflicts with grizzly bears by exploring “grizzly bears” online at:

- U.S. Fish & Wildlife Service
- [Wyoming Game & Fish](#)
- [Montana Fish, Wildlife & Parks](#)
- [Interagency Grizzly Bear Committee](#)
- Orgs with interests in Grizzly Bear Management

Bonus Extension Activity

Challenge each group to create a Grizzly Savvy E-Newsletter directed toward their target audience to share with the entire class. Open the class to discussion on potential effectiveness of their e-newsletter outreach.



Educational Standards

COMMON CORE ELA

READING INFORMATIONAL TEXT

GRADES 9-10

- **CCSS.ELA-Literacy.RI.9-10.1** Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
- **CCSS.ELA-Literacy.RI.9-10.2** Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.
- **CCSS.ELA-Literacy.RI.9-10.7** Analyze various accounts of a subject told in different mediums (e.g., a person's life story in both print and multimedia), determining which details are emphasized in each account.
- **CCSS.ELA-Literacy.RI.9-10.8** Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning.

READING INFORMATIONAL TEXT

GRADES 11-12

- **CCSS.ELA-Literacy.RI.11-12.1** Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.
- **CCSS.ELA-Literacy.RI.11-12.3** Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the text.
- **CCSS.ELA-Literacy.RI.11-12.7** Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem.

WRITING

GRADES 9-10

- **CCSS.ELA-Literacy.W.9-10.1** Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
 - **CCSS.ELA-Literacy.W.9-10.1.a** Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among claim(s), counterclaims, reasons, and evidence.
 - **CCSS.ELA-Literacy.W.9-10.1.b** Develop claim(s) and counterclaims fairly, supplying evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level and concerns.
 - **CCSS.ELA-Literacy.W.9-10.1.c** Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.

- **CCSS.ELA-Literacy.W.9-10.1.d** Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.
- **CCSS.ELA-Literacy.W.9-10.1.e** Provide a concluding statement or section that follows from and supports the argument presented.
- **CCSS.ELA-Literacy.W.9-10.4** Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1-3 above.)
- **CCSS.ELA-Literacy.W.9-10.5** Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. (Editing for conventions should demonstrate command of Language standards 1-3 up to and including grades 9-10 here.)
- **CCSS.ELA-Literacy.W.9-10.7** Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.
- **CCSS.ELA-Literacy.W.9-10.8** Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.
- **CCSS.ELA-Literacy.W.9-10.9** Draw evidence from literary or informational texts to support analysis, reflection, and research.

WRITING

GRADES 11-12

- **CCSS.ELA-Literacy.W.11-12.1** Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
 - **CCSS.ELA-Literacy.W.11-12.1.a** Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence.
 - **CCSS.ELA-Literacy.W.11-12.1.b** Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level, concerns, values, and possible biases.
 - **CCSS.ELA-Literacy.W.11-12.1.c** Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.
 - **CCSS.ELA-Literacy.W.11-12.1.d** Establish and maintain a formal style and objective

tone while attending to the norms and conventions of the discipline in which they are writing.

- **CCSS.ELA-Literacy.W.11-12.1.e** Provide a concluding statement or section that follows from and supports the argument presented.
- **CCSS.ELA-Literacy.W.11-12.4** Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1-3 above.)
- **CCSS.ELA-Literacy.W.11-12.5** Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. (Editing for conventions should demonstrate command of Language standards 1-3 up to and including grades 11-12 here.)
- **CCSS.ELA-Literacy.W.11-12.7** Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.
- **CCSS.ELA-Literacy.W.11-12.8** Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.
- **CCSS.ELA-Literacy.W.11-12.9** Draw evidence from literary or informational texts to support analysis, reflection, and research.

SPEAKING AND LISTENING GRADES 9-10

- **CCSS.ELA-Literacy.SL.9-10.1** Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9-10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.
 - **CCSS.ELA-Literacy.SL.9-10.1.a** Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas.
 - **CCSS.ELA-Literacy.SL.9-10.1.b** Work with peers to set rules for collegial discussions and decision-making (e.g., informal consensus, taking votes on key issues, presentation of alternate views), clear goals and deadlines, and individual roles as needed.
 - **CCSS.ELA-Literacy.SL.9-10.1.c** Propel conversations by posing and responding to questions that relate the current discussion to broader themes or larger ideas; actively incorporate others into the discussion; and clarify, verify, or challenge ideas and conclusions.

- **CCSS.ELA-Literacy.SL.9-10.1.d** Respond thoughtfully to diverse perspectives, summarize points of agreement and disagreement, and, when warranted, qualify or justify their own views and understanding and make new connections in light of the evidence and reasoning presented.
- **CCSS.ELA-Literacy.SL.9-10.2** Integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, orally) evaluating the credibility and accuracy of each source.
- **CCSS.ELA-Literacy.SL.9-10.4** Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task.
- **CCSS.ELA-Literacy.SL.9-10.5** Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.

SPEAKING AND LISTENING GRADES 11-12

- **CCSS.ELA-Literacy.SL.11-12.1** Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 11-12 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.
 - **CCSS.ELA-Literacy.SL.11-12.1.a** Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas.
 - **CCSS.ELA-Literacy.SL.11-12.1.b** Work with peers to promote civil, democratic discussions and decision-making, set clear goals and deadlines, and establish individual roles as needed.
 - **CCSS.ELA-Literacy.SL.11-12.1.c** Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives.
 - **CCSS.ELA-Literacy.SL.11-12.1.d** Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the task.
- **CCSS.ELA-Literacy.SL.11-12.2** Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.

- **CCSS.ELA-Literacy.SL.11-12.4** Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks.
- **CCSS.ELA-Literacy.SL.11-12.5** Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.

Next Generation Science Standards (High School)

- **[HS-LS2-1 Ecosystems: Interactions, Energy, and Dynamics](#)** Use mathematical and/or computational representations to support explanations of factors that affect carrying capacity of ecosystems at different scales.
- **[HS-LS2-2 Ecosystems: Interactions, Energy, and Dynamics](#)** Use mathematical representations to support and revise explanations based on evidence about factors affecting biodiversity and populations in ecosystems of different scales.
- **[HS-LS2-7 Ecosystems: Interactions, Energy, and Dynamics](#)** Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.*
- **[HS-LS2-8 Ecosystems: Interactions, Energy, and Dynamics](#)** Evaluate evidence for the role of group behavior on individual and species' chances to survive and reproduce.
- **[HS-LS4-6 Biological Evolution: Unity and Diversity](#)** Create or revise a simulation to test a solution to mitigate adverse impacts of human activity on biodiversity.*

Resources

Grizzly Bear Booklet – [Grizzly Bears of Montana: Second Edition](#)

GRIZZLY SAVVY, INC.

Pre-Lesson Student Worksheet

Name:

Class:

Date:

Before watching the [Reducing Human-Grizzly Conflicts](#) video, review these questions below and look for answers during the video.

QUESTIONS

1. What are two types of potentially serious grizzly bear encounters?
2. Why is there an increased need for public education for people in grizzly country?
3. Besides education, what tools are used to prevent or reduce serious conflicts?
4. What single tool has proven the most effective at preventing serious encounters with grizzly bears?
5. What three things are important with using bear spray?
6. Since 2010, how many people have grizzly bears killed in the Western U.S.?

GRIZZLY SAVVY, INC. EDUCATIONAL PLAN

Resident Educators Group

Name:

Class:

Date:

Welcome to the **Resident Educators Group** of your new business enterprise, Grizzly Savvy, Inc. Your group recognizes the variety of human-grizzly bear conflicts that can arise in a community where many permanent and seasonal residents suffer from a serious lack of **Grizzly Savvy**. That void in education represents a golden opportunity for your group fill a genuine community need.

Common sense would point to the fact that allowing situations where bears can get easy access to pet foods, bird feeders, open garbage, backyard chickens, and other human sources of food is a sure-fire recipe for generating conflicts with huge, furry, walking appetites known as grizzly bears.

To make matters worse, recent increases in both the grizzly bear population and human population are creating increasing variety and number of human-grizzly conflicts that threaten the safety of people and the troublesome grizzly bears. Toss in the fact that some new and seasonal residents moving in don't know beans about bears and think that humans and grizzly bears can somehow peacefully coexist. Reality however is that bears will always behave like bears and people will behave like... people.

Despite these combinations of grizzly savvy educational challenges that you face, your group needs to come up with a **Grizzly Savvy Educational Plan** that best serves public safety and your group's opportunity to fill a critical educational void.

Your Goals - To develop your plan, you will conduct online research and create an educational plan that is specifically designed for community "residents" and addresses the goals listed below.

- Develop a list of proven and new innovative community methods or technologies that can reduce conflicts between humans and grizzly bears.
- Establish guidelines and methods for handling "dangerous repeat offender bears" using both lethal and non-lethal measures while ensuring these actions are acceptable to the public and comply with legal requirements.
- Develop a set of 4 to 6 "community-wide laws" that residents need to follow to reduce conflict with grizzly bears.
- Develop at least three ways that you can effectively distribute your grizzly savvy educational messaging to the residents (seasonal and permanent)... that include, moms, dads, youth, and seniors. Be prepared to support your distribution ideas during class discussion.



When developing your educational plan and distribution ideas, consider the possible goals of the other Grizzly Savvy groups and how they might align with yours. In class Session 3, each group will have two members present their educational plans, followed by a class discussion to decide on the ideal combination of messages to include in an overall **Grizzly Savvy Educational Plan**... including effective distribution of messaging that balances realistic ways to reduce conflict that residents will likely embrace.

Considerations to address when developing your plan and during the class discussion in Session 3.

- Can your education plan really help protect the safety of **all residents**, including youth and seniors who share the residential area with nearby grizzly bears?
- Considering the four main causes of bear-human conflicts in residential areas, how might new technology or inventions be used to reduce conflicts?
- Because public education is actually the business of “selling ideas” that your target audience responds to... what psychological motivators can you use in your messaging? (here’s a hint: why do Americans spend over \$100 million a year on headache meds? **Pain** and **fear** of pain)
- What educational ideas might empower the entire community to somehow band together in reducing human-grizzly conflicts?

Working with other members of your Grizzly Savvy group, research and develop your **Grizzly Savvy Educational Plan** that addresses your group **goals** and **considerations**. You will use your plan and your research to develop a “presentation” that will include at least one form of art or media such as either video, poster, graphs, charts, or images. Two members of your group will present your educational plan to the entire class during Session 3. Each group will have 7 to 8 minutes to present their plan, followed by a few minutes of questions by the other groups.

After the three groups present their educational plans, the teacher will lead a group discussion on how similar or key parts of the various plans could be included in a unified plan that can help reduce human-bear conflicts. Even compelling educational messaging does no good if nobody hears or sees it. So be prepared to also discuss how your educational plan will be distributed to the different sectors within the residents.

GRIZZLY SAVVY, INC. EDUCATIONAL PLAN

Outdoor Recreationists Educators Group

Name:

Class:

Date:

Welcome to the **Outdoor Recreationists Educators Group** of your new business enterprise, Grizzly Savvy, Inc. Your group is made up of outdoor educators, park rangers, and tourist guides, and a backpacking-camping outlet in Yellowstone National Park. Each year, tourists, anglers, hikers, mountain bikers, campers, wildlife watchers, and hunters venture into regions where grizzly bears live. While you are passionate about inspiring people to explore these wild places, it's essential they do so safely. This means taking steps to avoid encounters with grizzly bears and understanding how to respond if one occurs. By doing this both people and bears will be protected.

Hunters quietly move through remote wilderness, harvesting and field dressing wild game that grizzly bears also seek as food. Anglers participate in the joy of fishing in streams, which are natural pathways for grizzlies, and often clean their catches on the banks —making tempting meals for these bears. Campers prepare and cook food that bears can smell from as far as three miles away. Many tourists visit grizzly bear habitats without prior experience or education about bears, highlighting the importance of providing them with the knowledge and tools needed to prevent dangerous encounters. You've also witnessed how much park tourists and wildlife watchers will do just about anything to get near or snap a photo of one of the many grizzly bears roaming the park nowadays.



In addition to posing genuine dangers to tourists and outdoor adventurers, encounters between humans and grizzly bears frequently make headlines, sparking public controversy: some advocate for the bear's protection, while others call for its euthanasia. This makes it even more challenging balancing social tolerance for grizzly bears. When you see outdoor enthusiasts risking bear encounters or not having the education and tools to avoid one, it weighs heavily on you. You envision the next headline to read: "Tourists continue to disappear in the park, hunter recovering in ICU after grizzly encounter, bear shot and killed leaving orphaned cubs, camper dragged from tent, hiker killed by sow defending her cubs." Despite the combinations of grizzly savvy educational challenges that you face, your group needs to come up with a **Grizzly Savvy Educational Plan** that can best equip the variety of tourists and outdoor recreationists and their assortment of activities to avoid the range of potential conflicts with grizzly bears.

Your Goals - To develop your plan, you will conduct online research and create an educational plan that is specifically designed for "park tourists" and addresses the goals listed below.

- Develop a list of proven and new innovative methods or technologies that can reduce conflicts between seasonal tourists, outdoor recreationists, and grizzly bears.
- Establish guidelines and methods for handling "dangerous repeat offender bears" using both lethal and non-lethal measures while ensuring these actions are acceptable to the public and comply with legal requirements.
- Develop a set of 4 to 6 universal rules that apply to tourists and outdoor recreationists that they should follow to reduce conflicts with grizzly bears.

Formulate two to three supplementary guidelines tailored specifically for two distinct types of outdoor recreational activities.

- Develop at least three ways that you can effectively distribute your grizzly savvy educational messaging to tourists, hikers, campers, wildlife watchers, campers, anglers, hunters, and mountain bikers. Be prepared to support your ideas on how to distribute your educational grizzly savvy messaging during class discussion.

When developing your educational plan and distribution ideas, consider the possible goals of the other educational groups and how they might align with yours. In class Session 3, each group will have two members present their educational plans, followed by a class discussion to decide on the ideal combination of messages to include in an overall **Grizzly Savvy Educational Plan**... including effective distribution of messaging that balances realistic ways to reduce conflict that tourists will likely follow.

Considerations to address when developing your plan and during the class discussion in Session 3.

- Can your education plan really help protect the safety of **all tourists and outdoor recreationists**, including those who have mobility issues or are disabled, youth, and seniors?
- Considering the four main causes (via your research) of bear-human conflicts with tourists and outdoor recreationists how might new technology or inventions be used to reduce human-bear conflicts?
- Because public education is actually the business of “selling ideas” that your target audience responds to... what psychological motivators can you use in your messaging? (here’s a hint: why do Americas spend over \$100 million a year on headache meds? **Pain** and **fear** of pain)
- What grizzly savvy educational ideas that are best suited for tourists and outdoor recreationists might also be used or adapted by all people in grizzly country to reduce human-grizzly conflicts?

Working with other members of your Grizzly Savvy group, research and develop your **Grizzly Savvy Educational Plan** that addresses your “audiences” **goals** and **considerations**. You will use your plan and your research to develop a presentation that will include at least one form of art or media such as either video, poster, graphs, charts, or images. Two members of your group will present your educational plan to the entire class during Session 3. Each group will have 7 to 8 minutes to present their plan, followed by a few minutes of questions by the other groups.

After the three groups present their educational plans, the teacher will lead a group discussion on how similar or key parts of the various plans could be included in a unified plan that can help reduce human-bear conflicts. Even compelling educational messaging does no good if nobody hears or sees it. So, research and be prepared to also discuss how your educational plan will be effectively distributed to the different types of tourists so that it will have a real park-wide impact.

GRIZZLY SAVVY, INC. EDUCATIONAL PLAN

Agricultural Educators Group

Name:

Class:

Date:

Welcome to the **Agricultural Educators Group** of your new business enterprise, Grizzly Savvy, Inc. Your group is made up of agricultural producers that include livestock ranchers, crop farmers, smaller producers such as hobby farms that raise chicken, goat and hog raisers, and even fruit orchards. Unlike most who live and work in grizzly country, you suffer more of a direct impact of grizzly bears expanding both their numbers and their distribution in recent years. When America's largest carnivore literally "eats up" your profit each year, you can suffer a substantial business loss. Besides your livestock being killed and consumed, you also suffer physically and emotionally trying to protect the domesticated animals you've raised that are under your care. Farmers suffer a similar fate when bears flatten parts of their crops in the field or break into storage bins and gobble their harvested crops. You also fear for your family's safety and worry about one of them getting injured or worse killed.



Even though many agricultural producers know firsthand how much grizzly bears can and do create serious conflicts, some would still benefit from a new **"Agricultural Chapter in Grizzly Savvy"** on how to further protect their business, property, and family by reducing grizzly conflicts. So grizzly savvy-ag education represents a golden opportunity for your group help ranchers and farmers.

Your Goals - To develop your plan, you will conduct online research and create an educational plan that is specifically designed for ranchers and farmers that addresses the goals listed below.

- Develop a list of proven and new innovative methods or technologies that can reduce conflicts between agriculture owners and grizzly bears.
- Establish guidelines and methods for handling "dangerous repeat agricultural offender bears" using both lethal and non-lethal measures while ensuring these actions are acceptable to the public and comply with legal requirements.
- Develop a set of 4 to 6 "agricultural grizzly-proof guidelines" that ranchers and farmers can use to reduce conflict with grizzly bears.
- Develop at least three ways that you can effectively distribute your grizzly savvy educational messaging to the agricultural community... that includes, livestock ranchers, crop farmers, smaller producers and hobby farms raising chicken, goat and hog raisers, and even fruit orchards. And be prepared to support your distribution ideas during class discussion.

When developing your educational plan and distribution ideas, consider the possible goals and ideas of the other Grizzly Savvy groups and how they might align with yours. In class Session 3, each group will have two members present their educational plans, followed by a class discussion to decide on the ideal combination of messages to include in an overall **Grizzly Savvy Educational Plan...** including effective distribution of messaging that balances realistic ways to reduce conflict that residents will likely embrace.

Considerations to address when developing your plan and during the class discussion in Session 3.

- How might different parts of your agricultural education plan disproportionately help the different types of agriculture?
- Considering the four main causes of bear-human conflicts with ranching and farming, how might new technology or inventions be used to reduce conflicts?
- Because public education is actually the business of “selling ideas” that your target audience responds to... what psychological or economical motivators can you use in your messaging?
- What educational ideas might empower the entire agricultural community to somehow band together in reducing human-grizzly conflicts?

Working with other members of your Grizzly Savvy group, research and develop your **Grizzly Savvy Educational Plan** that addresses your group **goals** and **considerations**. You will use your plan and your research to develop a “presentation” that will include at least one form of art or media such as either video, poster, graphs, charts, or images. Two members of your group will present your educational plan to the entire class during Session 3. Each group will have 7 to 8 minutes to present their plan, followed by a few minutes of questions by the other groups.

After the three groups present their educational plans, the teacher will lead a group discussion on how similar or key parts of the various plans could be included in a unified plan that can help reduce human-bear conflicts. Even compelling educational messaging does no good if nobody hears or sees it. So be prepared to also discuss how your educational plan will be distributed to the different sectors within the residents.